

MODULATION OF A $\beta$  LEVELS BY  $\beta$ -SECRETASE BACE2

Abstract of the Disclosure

The present invention is based on the findings that BACE2, a homolog of  $\beta$ -secretase BACE, is able to stimulate processing of APP in a non-amyloidogenic pathway, thereby suppressing the level of A $\beta$ . Accordingly, the present invention provides methods and means for the identification and use of modulators of this unique activity of BACE2 to suppress A $\beta$  production. The compounds identified using the methods and means provided herein may be used as potential candidates for the treatment of Alzheimer's disease and other neurological diseases.

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